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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,372	10/14/2004	Thomas Justel	DE 020101	8681

24737 7590 10/06/2006

PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
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EXAMINER

QUARTERMAN, KEVIN J

ART UNIT PAPER NUMBER

2879

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/511,372

**Applicant(s)**

JUSTEL ET AL.

**Examiner**

Kevin Quarterman

**Art Unit**

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 1004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 3 includes a material,  $[\text{Pr}(\text{PO}_3)_3]_n$ , with a subscript "n" that is not defined in the claim, or in the specification.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Hayashi (US Pub. 2002/0089284).
5. Regarding independent claim 1, Figure 1 of Hayashi shows a plasma display panel equipped with a front plate (32) which is a glass plate on which a dielectric layer

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(29) and a protective layer (28) are deposited, with a carrier plate (27) covered by a segmented fluorescent layer (21) which contains red-emitting color segments or a red-emitting fluorescent substance, blue-emitting color segments of a blue-emitting fluorescent substance and green-emitting color segments of a green-emitting  $Tb^{3+}$ -activated fluorescent substance, has a rib structure (24) which divides the space between the front plate and carrier plate into plasma cells (34) which are gas-filled, with one or more electrode arrays (26, 30, 31) on the front plate and the carrier plate for generating silent electrical discharges in the plasma cells and has a green color filter layer (23) between the fluorescent layer of a green-emitting color segment and the carrier plate.

6. Regarding claim 4, Hayashi discloses the green  $Tb^{3+}$ -activated fluorescent substance selected from the group  $(Y_xGd_{1-x-y})BO_3:Tb_y$  ( $0 \leq x \leq 1$ ,  $0 \leq y \leq 1$ ),  $LaPO_4:Tb$ ,  $(Y_xGd_{1-x-y})_3Al_5O_{12}:Tb_y$  ( $0 \leq x \leq 1$ ,  $0 \leq y \leq 1$ ),  $CeMgAl_{11}O_{19}:Tb$ ,  $GdMgB_5O_{10}:Ce,Tb$ ,  $(Y_xGd_{1-x-y})_2SiO_5:Tb_y$  ( $0 \leq x \leq 1$ ,  $0 \leq y \leq 1$ ),  $(In_xGd_{1-x-y})BO_3:Tb_y$  ( $0 \leq x \leq 1$ ,  $0 \leq y \leq 1$ ),  $(Y_{1-x-y}Gd_x)_2O_2S:Tb_y$  ( $0 \leq x \leq 1$ ,  $0 \leq y \leq 1$ ),  $LaOBr:Tb$ ,  $LaOCl:Tb$  and  $LaPO_4:Ce,Tb$  (pg.3, ¶ [0041]).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US Pub. 2002/0089284) in view of Sohn (US 6,650,052).

10. Regarding claim 2, Hayashi teaches the limitations of independent claim 1 discussed earlier but fails to exemplify the green color filter layer containing  $\text{Pr}^{3+}$ -containing materials.

11. Sohn teaches that it is known in the art to provide plasma display panels with a color filter layer having  $\text{Pr}^{3+}$ -containing materials (col. 3, ln. 6-8) for improving color purity (col. 2, ln. 50-51).

12. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the plasma display panel of Hayashi with the color filter layer containing  $\text{Pr}^{3+}$ -containing materials, as taught by Sohn, for improving the efficiency of the device.

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13. Regarding claim 3, Sohn discloses the  $\text{Pr}^{3+}$ -containing materials including material selected from the group  $\text{PrPO}_4$ ,  $[\text{Pr}(\text{PO}_3)_3]_n$ ,  $\text{PrF}_3$ ,  $\text{PrOCl}$ ,  $\text{PrOF}$ ,  $\text{PrOBr}$ ,  $\text{Pr}_3\text{Al}_5\text{O}_{12}$ ,  $\text{PrBO}_3$ ,  $\text{Pr}_2\text{SiO}_5$ ,  $\text{Pr}_2\text{Si}_2\text{O}_7$ , and  $\text{PrB}_3\text{O}_6$  (col. 4, ln. 31-35).

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Juestel (US 6,573,654) discloses a plasma picture screen with a terbium (III)-activated phosphor.

**Contact Information**


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Quarterman whose telephone number is (571) 272-2461. The examiner can normally be reached on M-TH (7-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kevin Quarterman  
Examiner  
Art Unit 2879

kq   
30 September 2006

  
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